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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,649	03/01/2002	Ronald Lynn Blair	PU020030	6963

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EXAMINER

JONES, HEATHER RAE

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 12/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/086,649	Applicant(s) BLAIR ET AL.	
	Examiner Heather R. Jones	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-14 and 18-24 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 15-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments filed September 19, 2006 have been fully considered but they are not persuasive.

The Applicant argues on page 9, lines 12-23 that Suito does not teach, suggest, or disclose "repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed of the video presentation." The Examiner respectfully disagrees. Suito et al. discloses that for each processing unit period, sound absence portion(s) of the reproduced sound signal are deleted (or partially deleted) within a range corresponding to a normal speed reproduction. Deleting is the same as dropping selected ones of the digital audio samples and the claim does not require the apparatus to be able to repeat and drop selected ones of the digital audio samples. Therefore, Suito et al. meets the claim limitations and the rejection is maintained.

The Applicant argues on page 9, lines 24-27 that there is absolutely no teaching, suggestion, or disclosure in Suito for "transforming the digital audio samples from time domain to corresponding frequency domain audio samples." The Examiner respectfully disagrees. Suito discloses in col. 5, lines 53-60 that the video data and sound data is compressed in accordance with a compression coding method and a multiplexing method of the MPEG-2 standard. MPEG-2 inherently transforms the digital audio samples from time domain to

corresponding frequency domain audio samples in order to process the samples. Therefore, Suito et al. meets the claim limitations and the rejection is maintained.

The Applicant argues on page 11, lines 1-5 that Suito fails to teach "scaling a playback audio frequency of the frequency domain audio samples in accordance with the trick mode playback. The Examiner respectfully disagrees. Suito discloses in Figs. 3-6 that the samples go through an amplitude suppression process, which means the amplitudes of the samples are scaled accordingly. Suito discloses that the video data and sound data is compressed in accordance with a compression coding method and a multiplexing method of the MPEG-2 standard, which means the samples are transformed from the time domain to the corresponding frequency domain in order to process the samples. Therefore, Suito et al. meets the claim limitations and the rejection is maintained.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 2, 6, 11-14, 18, 23, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Suito et al. (U.S. Patent 6,925,340).

Regarding claim 1, Suito et al. discloses a method for playing an audio track during video trick mode playback of a video presentation, the method comprising: reading a coded digital data from a storage medium, the coded

digital data comprising a video programming and corresponding audio programming; decoding a plurality of digital audio samples corresponding to a selected portion of the video presentation from a portion of the read digital data; repeating or dropping selected ones of the digital audio samples at a rate corresponding to a selected trick mode video playback speed at the video presentation (abstract); transforming the digital audio samples from time domain to corresponding frequency domain audio samples; and scaling a playback audio frequency of the frequency domain audio samples in accordance with the trick mode playback (col. 7, line 59 – col. 8, line 8).

Regarding claim 2, Suito discloses all the limitations as previously discussed with respect to claim 1 as well as disclosing the method further comprises generating an audio playback signal corresponding only to a remaining set of the audio samples (abstract).

Regarding claim 6, Suito discloses all the limitations as previously discussed with respect to claim 1 including that the scaling step further comprises transforming said scaled frequency domain audio samples to corresponding time domain digital audio samples (col. 7, line 59 – col. 8, line 8).

Regarding claim 11, Suito discloses all the limitations as previously discussed with respect to claim 1 including that the storage medium is selected from a group consisting of a DVD, a magnetic hard disk, magneto optical disk, a video CD, and a solid state memory device (as can be seen from Fig. 1).

Regarding claim **12**, Suito discloses all the limitations as previously discussed with respect to claim 1 including that the coded digital data is an MPEG format and the reading step further comprises decoding an MPEG bit stream to obtain said audio samples (col. 5, lines 53-60).

Regarding claims **13, 14, 18, 23, and 24**, these are apparatus claims corresponding to the method claims 1, 2, 6, 11, and 12. Therefore, claims 13, 14, 18, 23, and 24 are analyzed and rejected as previously discussed with respect to claims 1, 2, 6, 11, and 12.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 7-10 and 19-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Suito as applied to claims 1 and 13 above, and further in view of Shimura (U.S. Patent 6,658,197).

Regarding claims **7**, Suito discloses all the limitations as previously discussed with respect to claim 1, but fails to further disclose the method comprising repeating selected ones of the audio samples at a rate inversely proportional to a selected trick mode video playback speed of said video programming to produce a trick mode set of audio samples, and generating an audio playback signal corresponding to said trick mode set of the audio samples.

Referring to the Shimura reference, Shimura discloses a method comprising repeating selected ones of the audio samples at a rate inversely proportional to a selected trick mode video playback speed of said video programming to produce a trick mode set of audio samples, and generating an audio playback signal corresponding to said trick mode set of the audio samples (Fig. 4; col. 5, lines 33-50; col. 6, lines 29-37).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the feature of having better quality sound at a lower speed as disclosed by Shimura to the device disclosed by Suito in order to provide a user with a device that provides a quality sound at a higher or lower speed (during trick play).

Regarding claim 8, Suito in view of Shimura discloses all the limitations as previously discussed with respect to claims 1 and 7 including that the audio samples are repeated $1/n$ times, where n is equal to the selected trick mode playback speed relative to a normal playback speed (Shimura: Fig. 4).

Regarding claims 9 and 10, Suito in view of Shimura discloses all the limitations as previously discussed with respect to claims 1, 7, and 8 including that the scaling step further comprises scaling the amplitude of the frequency domain audio samples by factor of approximately $1/n$ as well as scaling an amplitude of the frequency domain audio samples by factor of approximately n (Shimura: Fig. 4; col. 7, lines 29-32; Suito: col. 7, line 31 – col. 8, line 8 – the frequency and the amplitude go hand in hand).

Regarding claims **19-22**, these are apparatus claims corresponding to the method claims 7-10. Therefore, claims 19-22 are analyzed and rejected as previously discussed with respect to claims 7-10.

Allowable Subject Matter

6. Claims 3-5 and 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: prior art fails to teach or fairly suggest a method for playing an audio track during video trick mode playback comprising the time domain audio samples are dropped at an average rate of every (n-1) of every n samples, where n is equal to the selected trick mode playback speed relative to a normal playback speed (claims 3-5 and 15-17).

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Jones whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

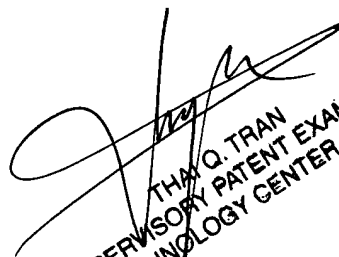
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones
Examiner
Art Unit 2621

HRJ
November 27, 2006



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